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AMENDMENTS TO THE CLAIMS

Claims 1-38: canceled

39. (currently amended) A system for controlling production of a package for enclosing at least one object, comprising:

 a server, comprising:

 input means for receiving package design criteria from a remote client device over a communications network;

 a processor for:

 generating simulation data based at least in part on the package design criteria, the simulation data including instructions for rendering a simulated image of the package; and

 generating fabrication control data and packaging control data based at least in part on the package design criteria; and

 output means for communicating the simulation data to the remote client device over the communications network, and for communicating the fabrication control data to a control unit associated with a fabrication device, the fabrication control data comprising fabrication instructions that cause the fabrication device to automatically produce at least part of the package, and for communicating the packaging control data to a control unit

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associated with a packaging device, the packaging control data comprising packaging instructions that cause a packaging device to automatically assemble at least part of the package.

40. (currently amended) The system of Claim 39, wherein the server is remote with respect to the fabrication device, and the output means is further for communicating the fabrication control data to the control unit associated with the fabrication device over the communications network.

41. (previously presented) The system of Claim 39, wherein the package design criteria include at least one of the following parameters: number of objects to be packaged, dimensions of each object, shape of each object, arrangement of objects, package type, package dimensions, and package graphics.

42. (previously presented) The system of Claim 39, wherein the communications network is the Internet.

43. (currently amended) The system of Claim 39, wherein the fabrication control data comprises instructions that cause the fabrication device to automatically produce at least part of the package by performing at least one of the following actions: printing at least one carton board, and cutting the at least one carton board into at least one blank, ~~erecting a carton~~

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~~from the at least one blank, loading the carton with the at least one object, and closing the package.~~

44. (currently amended) The system of Claim 39, wherein the server further comprises a storage device for storing at least one of the package design criteria and the fabrication control data.

45. (previously presented) The system of Claim 39, wherein the at least one object comprises a plurality of differently-shaped objects.

46. (currently amended) The system of Claim 39, wherein the fabrication device comprises at least one of the following: means for cutting a package blank, and means for printing on a package blank, ~~means for erecting a carton, means for loading a carton, and means for closing a package.~~

47. (currently amended) A system for designing and producing a package, comprising:

a client device, comprising:

input means for receiving user selections of package design criteria, and for receiving simulation data from a remote server over a communications network;

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output means for communicating the package design criteria to the remote server over the communications network, the remote server being for:

generating simulation data based at least in part on the package design criteria and communicating the simulation data to the client device; and

generating fabrication control data and packaging control data based at least in part on the package design criteria, ~~and the~~ communicating the fabrication control data to a control unit associated with a fabrication device, the fabrication control data comprising fabrication instructions that cause the fabrication device to automatically produce at least part of the package, and communicating the packaging control data to a control unit associated with a packaging device, the packaging control data comprising packaging instructions that cause a packaging device to automatically assemble at least part of the package;

a client processor for rendering a simulated image of the package based at least in part on the simulation data; and

display means for rendering the simulation in a graphical format viewable by the user.

48. (previously presented) The system of Claim 47, wherein the output means is further for communicating the package design criteria in response to a command received from the user.

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49. (currently amended) The system of Claim 47, wherein the fabrication device is remote with respect to the server, and the server is configured to communicate output means is further for communicating the control data to the control unit associated with the fabrication device over the communications network.

50. (previously presented) The system of Claim 47, wherein the package design criteria include at least one of the following parameters: number of objects to be packaged, dimensions of each object, shape of each object, arrangement of objects, package type, package dimensions, and package graphics.

51. (previously presented) The system of Claim 47, wherein the communications network is the Internet.

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52. (currently amended) The system of Claim 47, wherein the fabrication control data comprises instructions that program the fabrication device to automatically produce at least part of the package by performing at least one of the following steps: printing at least one carton board, and cutting the at least one carton board into at least one blank, ~~erecting a carton from the at least one blank, loading the carton to form the package, and closing the package.~~

53. (currently amended) The system of Claim 47, wherein the server further comprises a storage device for storing at least one of the package design criteria and the fabrication control data.

54. (previously presented) The system of Claim 47, wherein the at least one object comprises a plurality of differently-shaped objects.

55. (currently amended) The system of Claim 47, wherein the fabrication device comprises at least one of the following: means for cutting a package blank, and means for printing on a package blank, ~~means for erecting a carton, means for loading a carton, and means for closing a package.~~

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56. (currently amended) A computer readable medium having stored thereon executable code which causes a server to perform a method for controlling production of a package, the method comprising:

receiving package design criteria from a remote client device over a communications network;

generating simulation data based at least in part on the package design criteria, the simulation data including instructions for rendering a simulated image of the package;

generating fabrication control data and packaging control data based at least in part on the package design criteria; and

communicating the fabrication control data to a control unit associated with a remote fabrication device, the fabrication control data comprising fabrication instructions that cause the fabrication device to automatically produce at least part of the package; and

communicating the packaging control data to a control unit associated with a packaging device, the packaging control data comprising packaging instructions that cause the packaging device to assemble at least part of the package.

57. (previously presented) The computer readable medium of Claim 56, wherein receiving package design criteria comprises receiving at least one of the following parameters: number of objects to be packaged, dimensions of each object, shape of each object, arrangement of objects, package type, package dimensions, and package graphics.

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58. (previously presented) The computer readable medium of Claim 56, wherein receiving package design criteria from a remote client device over a communications network comprises receiving package design criteria over the Internet.

59. (currently amended) The computer readable medium of Claim 56, wherein communicating the fabrication control data comprises communicating instructions that cause the fabrication device to automatically produce the package by performing at least one of the following actions: printing at least one carton board, and cutting the at least one carton board into at least one blank, ~~erecting a carton from the at least one blank, loading the carton to form the package, and closing the package.~~

60. (currently amended) The computer readable medium of Claim 56, wherein the method further comprises storing at least one of the package design criteria and the fabrication control data.

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61. (currently amended) A computer readable medium having stored thereon executable code which causes a client processor to perform a method for designing and producing a package, the method comprising:

receiving user selections of package design criteria;

communicating the package design criteria to a remote server over a communications network, the remote server being for:

generating simulation data based at least in part on the package design criteria and communicating the simulation data to the client processor; and
generating fabrication control data and packaging control data based at least in part on the package design criteria, and communicating the fabrication control data to a control unit associated with a fabrication device, the fabrication control data comprising instructions that cause the fabrication device to automatically produce at least part of the package, communicating the packaging control data to a control unit associated with a packaging device, the packaging data comprising packaging instructions that cause a packaging device to assemble at least part of the package; and
rendering a simulated image of the package based at least in part on the simulation data.

62. (previously presented) The computer readable medium of Claim 61, wherein the method further comprises communicating the package design criteria in response to a command received from the user.

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63. (previously presented) The computer readable medium of Claim 61, wherein receiving user selection of the package design criteria includes receiving at least one of the following parameters: number of objects to be packaged, dimensions of each object, shape of each object, arrangement of objects, package type, package dimensions, and package graphics.

64. (previously presented) The system of Claim 61, wherein communicating the package design criteria over a communications network comprises communicating over the Internet.

65. (currently amended) The system of Claim 61, wherein generating the fabrication control data comprises generating instructions that program the fabrication device to automatically produce at least part of the package by performing at least one of the following steps: printing at least one carton board, and cutting the at least one carton board into at least one blank, ~~erecting a carton from the at least one blank, loading the carton to form the package, and~~ closing the package.

66. (new) The system of claim 39, wherein the packaging control data comprises packaging instructions that cause a packaging device to selectively position the at least one object.

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67. (new) The system of claim 66, wherein the packaging instructions that cause a packaging device to selectively position the at least one object include instructions for activating at least one electromagnet of the packaging device to grasp the at least one object.

68. (new) The system of claim 67, wherein the at least one object is a bottle.

69. (new) The system of claim 39, wherein the packaging control data comprises packaging instructions that cause a packaging device to fold a carton.

70. (new) The system of claim 69, wherein the packaging instructions that cause a packaging device to fold a carton include instructions for actuating at least one motor of a folding robot.

71. (new) The system of claim 70, wherein the packaging instructions that cause a packaging device to fold a carton include instructions for folding the carton around the at least one object.

72. (new) The system of claim 39, wherein the packaging control data comprises packaging instructions that cause a packaging device to lock a carton.

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73. (new) The system of claim 72, wherein the packaging instructions that cause a packaging device to lock a carton include instructions for locking the carton around the at least one object.